VOL. 454 JOURNAL OF CHROMATOGRAPHY NOVEMBER 11, 1988

CONTENTS

(*Abstracts/Contents Lists published in Analytical Abstracts, ASCA, Biochemical Abstracts, Biological Abstracts, Chemical Abstracts, Chemical Titles, Chromatography Abstracts, Current Contents/Physical, Chemical & Earth Sciences, Current Contents/Life Sciences, Deep Sea Research/Part B: Oceanographic Literature Review, Excerpta Medica, Index Medicus, Mass Spectrometry Bulletin, PASCAL-CNRS, Referativnyi Zhurnal and Science Citation Index*)

Theoretical optimization of operating parameters in non-ideal displacement chromatography
by M. W. Phillips, G. Subramanian and S. M. Cramer (Troy, NY, U.S.A.) (Received July 19th, 1988) 1

Study of the injection process in a gas chromatograph split injection port
by A. E. Kaufman and C. E. Polymeropoulos (Piscataway, NJ, U.S.A.) (Received June 22nd, 1988) 23

Correlations between octanol–water partition coefficients and reversed-phase high-performance liquid chromatography capacity factors. Chlorobiphenyls and alkylbenzenes
by P. M. Sherblom and R. P. Eganhouse (Boston, MA, U.S.A.) (Received June 15th, 1988) 37

Measurement of the polarity of alkyl derivatives of diazapolyoxyethylene ethers by gas chromatography
by A. Voelkel and J. Szymanowski (Poznań, Poland) and J. Beger and H. Rüstig (Freiberg, G.D.R.) (Received May 25th, 1988) 51

Problems with the reproducibility of retention data on capillary columns with hydrocarbon C_{87} as the stationary phase
by E. Matisová, A. Moravcová, J. Krupčík and P. Čellár (Bratislava, Czechoslovakia) and P. A. Leclercq (Eindhoven, The Netherlands) (Received June 3rd, 1988) 65

Gas chromatographic retention on carbon adsorbents coated with monolayers of polynuclear aromatic hydrocarbons
by T. B. Gavrilova and E. V. Vlasenko (Moscow, U.S.S.R.) and N. Petsev, I. Topalova, Chr. Dimitrov and S. Ivanov (Sofia, Bulgaria) (Received July 8th, 1988) 73

Selection of high-performance liquid chromatographic methods in pharmaceutical analysis. I. Optimization for selectivity in reversed-phase chromatography
by M. Gazdag, G. Szepesi and E. Szeleczki (Budapest, Hungary) (Received June 16th, 1988) 83

Selection of high-performance liquid chromatographic methods in pharmaceutical analysis. II. Optimization for selectivity in normal-phase systems
by M. Gazdag, G. Szepesi and K. Fábián-Varga (Budapest, Hungary) (Received June 16th, 1988) 95

Automated analysis of various compounds with a wide range of boiling points by capillary gas chromatography based on retention indices
by H. Tokuda, E. Saitoh, Y. Kimura and S. Takano (Tochigi, Japan) (Received June 20th, 1988) 109

Solid sorbent sampling and chromatographic determination of glycidyl ethers in air
by J.-O. Levin, K. Andersson and R.-M. Karlsson (Umeå, Sweden) (Received July 8th, 1988) 121

Gas chromatographic separation of halogenated compounds on non-polar and polar wide bore capillary columns
by G. Castello, A. Timossi and T. C. Gerbino (Genova, Italy) (Received June 7th, 1988) . 129

Formation of polychlorinated dibenzo-*p*-dioxin from 2,4,4′-trichloro-2′-hydroxydiphenyl ether (Irgasan® DP300) and its chlorinated derivatives by exposure to sunlight
by A. Kanetoshi, H. Ogawa, E. Katsura, H. Kaneshima and T. Miura (Sapporo, Japan) (Received June 1st, 1988) 145

(*Continued overleaf*)

On-line high-performance liquid chromatography–post-column reaction–capillary gas chromatography analysis of lipids in biological samples
by T. V. Raglione (New Brunswick, NJ, U.S.A.) and R. A. Hartwick (Piscataway, NJ, U.S.A.) (Received June 13th, 1988) 157

Polymeric benzotriazole reagent for the off-line high-performance liquid chromatographic derivatization of polyamines and related nucleophiles in biological fluids
T.-Y. Chou, C.-X. Gao, S. T. Colgan and I. S. Krull (Boston, MA, U.S.A.) and C. Dorschel and B. Bidlingmeyer (Milford, MA, U.S.A.) (Received July 11th, 1988) 169

Preliminary applications of cross-axis synchronous flow-through coil planet centrifuge for large-scale preparative counter-current chromatography
by T.-Y. Zhang (Bethesda, MD, U.S.A.), Y.-W. Lee and Q. C. Fang (Research Triangle Park, NC, U.S.A.), R. Xiao (Sichuan, China) and Y. Ito (Bethesda, MD, U.S.A.) (Received May 27th, 1988) 185

Analysis of double-stranded Poly(A) · Poly(U) molecules by reversed-phase high-performance liquid chromatography
by J. Liautard, S. Colote, C. Ferraz and J. Sri-Widada (Montpellier, France), A. Pichot (Aramon, France) and J. P. Liautard (Montpellier, France) (Received May 18th, 1988) . . 195

Structural characterization of recombinant consensus interferon-α
by M. L. Klein, T. D. Bartley, P.-H. Lai and H. S. Lu (Thousand Oaks, CA, U.S.A.) (Received March 4th, 1988) 205

Freon FC-113, an alternative to methylene chloride for liquid–liquid extraction of trace organics from chlorinated drinking water
by E. A. Ibrahim and I. H. Suffet (Philadelphia, PA, U.S.A.) (Received June 24th, 1988) . 217

High-performance liquid chromatographic method for determining triazine herbicide residues in soil
by M. Battista, A. Di Corcia and M. Marchetti (Rome, Italy) (Received July 2nd, 1988) . 233

Phase-system switching as an on-line sample pretreatment in the bioanalysis of Mitomycin C using supercritical fluid chromatography
by W. M. A. Niessen, P. J. M. Bergers, U. R. Tjaden and J. van der Greef (Leiden, The Netherlands) (Received June 24th, 1988) 243

Gradient elution with normal phases on silica. A comparison between high-performance liquid and supercritical fluid chromatography
by W. Steuer, M. Schindler and F. Erni (Basle, Switzerland) (Received June 21st, 1988) . 253

Determination of organophosphorus acids by thermospray liquid chromatography–mass spectrometry
by E. R. J. Wils and A. G. Hulst (Rijswijk, The Netherlands) (Received June 13th, 1988) . 261

Separation of molecular species of triacylglycerols by high-performance liquid chromatography with a silver ion column
by W. W. Christie (Ayr, U.K.) (Received June 20th, 1988) 273

Gas chromatographic determination of indoleacetonitriles in rapeseed and *Brassica* vegetables
by B. A. Slominski and L. D. Campbell (Winnipeg, Canada) (Received May 19th, 1988) . 285

Determination of cotinine in urine using glass capillary gas chromatography and selective detection, with special reference to the biological monitoring of passive smoking
by G. Skarping (Lund, Sweden), S. Willers (Malmö, Sweden) and M. Dalene (Lund, Sweden) (Received July 20th, 1988) 293

Determination of cyclic glucans by anion-exchange chromatography with pulsed amperometric detection
by K. Koizumi, Y. Kubota, T. Tanimoto and Y. Okada (Nishinomiya, Japan) (Received June 8th, 1988) 303

Reversed-phase high-performance liquid chromatography technique for taurine quantitation
by D. W. Porter, M. A. Banks, V. Castranova and W. G. Martin (Morgantown, WV, U.S.A.) (Received June 13th, 1988) 311

High-performance size-exclusion chromatography of oils and fats
by S. Husain, G. S. R. Sastry, N. Prasada Raju and R. Narasimha (Hyderabad, India) (Received June 24th, 1988) 317

Notes

Theoretical aspects of the application of head-space analysis to the investigation of reaction kinetics in solutions
by A. N. Marinichev and B. V. Ioffe (Leningrad, U.S.S.R.) (Received June 14th, 1988) . . 327

Sedimentation focusing field-flow fractionation in channels of triangular cross-section
by S. Wičar (Brno, Czechoslovakia) (Received June 30th, 1988) 335

Macrocyclic polyfunctional Lewis bases. XII. Influence of complex formation on chromatographic migration
by J. Kostrowicki, E. Łuboch, B. Makuch, A. Cygan, A. Horbaczewski and J. F. Biernat (Gdańsk, Poland) (Received July 1st, 1988) 340

Nitroalkanes as a multidetector retention index scale for drug identification in gas chromatography
by R. Aderjan and M. Bogusz (Heidelberg, F.R.G.) (Received May 24th, 1988) 345

Dual retention mechanism on commercial acetylcellulose as a stationary phase in planar chromatography
by J. Gasparič (Hradec Králové, Czechoslovakia) (Received July 11th, 1988) 352

Effect of temperature difference between pump and column in molecular weight determination by gel permeation chromatography
by K. Miyazaki, Y. Tanaka and M. Saito (Tokyo, Japan) (Received June 20th, 1988) . . 357

Dependence of R_F values of cobalt(III) complexes on the size of diamine chelate ligands on silica gel thin layers
by G. Vučković, M. J. Malinar and M. B. Ćelap (Beograd, Yugoslavia) (Received July 4th, 1988) 362

Increasing the reliability of the identification of polymers by pyrolysis gas chromatography
by G. Stoev and T. Dentshev (Sofia, Bulgaria) (Received July 7th, 1988) 367

Direct coupling of a gas chromatograph to an ion trap detector
by R. Tiebach and W. Blaas (Berlin, F.R.G.) (Received May 26th, 1988) 372

New high-speed counter-current chromatograph equipped with a pair of separation columns connected in series
by Y. Ito (Bethesda, MD, U.S.A.) and F. E. Chou (Baltimore, MD, U.S.A.) (Received July 28th, 1988) 382

Isolation of virginiamycin-M_1 by droplet counter-current chromatography
by K. Saito, M. Horie, Y. Hoshino and N. Nose (Saitama, Japan) and Y. Shida, H. Nakazawa and M. Fujita (Tokyo, Japan) (Received June 27th, 1988) 387

Direct capillary trapping and gas chromatographic analysis of bromomethane and other highly volatile air pollutants
by H. Kallio (Turku, Finland) and T. Shibamoto (Davis, CA, U.S.A.) (Received May 19th, 1988) 392

Effect of differing thiols on the reversed-phase high-performance liquid chromatographic behaviour of *o*-phthaldialdehyde-thiol–amino acids
by M. R. Euerby (London, U.K.) (Received June 28th, 1988) 398

High-performance liquid chromatographic determination of macrosporin, altersolanol A, alterporriol A, B and C in fermentation of *Alternaria porri* (Ellis) Ciferri
by R. Suemitsu, K. Horiuchi, K. Ohnishi and S. Yanagawase (Kyoto, Japan) (Received June 10th, 1988) 406

(*Continued overleaf*)

Application of ion chromatography to the analysis of chromium hydroxy salts
by G. Grasso and G. Bufalo (Napels, Italy) (Received May 24th, 1988) 411

Silicic acid column chromatography of phosphonolipids. X. Some phosphono analogues of 1-O-alkylethylene glycol
by M. C. Moschidis (Athens, Greece) (Received July 15th, 1988) 420

Two-dimensional thin-layer chromatographic separation of phospholipid molecular species using plates with both reversed-phase and argentation zones
by D. A. Kennerly (Dallas, TX, U.S.A.) (Received July 27th, 1988) 425

In situ mineralization and determination of phosphorus in phospholipids on silica gel sintered thin-layer chromatographic plates
by T. Terabayashi, T. Ogawa and Y. Kawanishi (Kanagawa, Japan) and J. Ishii (Tokyo, Japan) (Received July 11th, 1988) 432

Purification of long-chain, saturated, free fatty acids
by K. J. Longmuir and S. Haynes (Irvine, CA, U.S.A.) (Received July 25th, 1988) 438

Determination of carbohydrate composition of soil hydrolysates by high-performance liquid chromatography
by D. A. Angers and P. Nadeau (Sainte-Foy, Canada) and G. R. Mehuys (Sainte-Anne-de-Bellevue, Canada) (Received July 28th, 1988) 444

Chiral high-performance liquid chromatographic analysis of phenoxy herbicide mixtures
by B. Blessington and N. Crabb (Bradford, U.K.) (Received July 26th, 1988) 450

Author Index 455

In articles with more than one author, the name of the author to whom correspondence should be addressed is indicated in the article heading by a 6-pointed asterisk (*)